## NASA's Global Change Master Directory (GCMD) Keyword Governance/Policy (Version 1.5)

Governance of Keywords: Policy for creation - Keywords will be created and maintained to normalize the classification and subsequent search. Policy for sharing and reuse - Keywords should be retrieved directly from the GCMD Keyword Management Web Service and may never be copied and used in another application unless proper credit is given. Please visit the following web page for information about how to cite the GCMD keywords, http://gcmd.gsfc.nasa.gov/Resources/valids/. The GCMD shall provide keywords, both for the authors of the metadata, and for the purpose of locating data and data-related services by interested users. The GCMD shall publish the process for maintaining keywords.

**Keyword Structure:** Underlying Policy - The GCMD shall provide keywords for user selection to characterize both data sets and services. The GCMD maintains a 5-level broad keyword classification on Earth science data and a 3-level keyword hierarchy for data services. The keyword rules have been used in determining "Terms" and three levels of "Variables" (known as Variable\_Level\_1, Variable\_Level\_2, and Variable\_Level\_3) for the GCMD keywords.

## Table A

| Earth Science Data   | Example  |
|--|--|
| Controlled (5 levels):  • Topic  • Term  • Variable_Level_1  • Variable_Level_2  • Variable_Level_3 Uncontrolled (free text):  • Detailed Variables  • Ancillary | <ul> <li>Topic: Biological Classification</li> <li>Term: Animals/Invertebrates</li> <li>Variable_Level_1: Cnidarians</li> <li>Variable_Level_2:         <ul> <li>Anthozoans/Octocorals</li> </ul> </li> <li>Variable_Level_3:             <ul> <li>Sea Fans/Sea Whips</li> </ul> </li> <li>Uncontrolled (free text):                   <ul> <li>Detailed Variables: Gorgonacea</li> <li>Ancillary: Gorgonian Colony</li> </ul> </li> </ul> |

These rules are used in GCMD's procedures for modifying "Topics", "Terms", and "Variables" to assist the user in locating Earth science data sets of interest. These keywords are expected to remain stable over time, although suggestions for additions and/or changes will always be considered. In addition, an uncontrolled (i.e., free-text) level of keywords is available for adding "Detailed Variables" beyond the controlled levels. Data set and service providers and metadata authors are free to populate this field with "Detailed Variables" for the data sets being documented. The field is searchable through a full-text search of the field (i.e., Lucene fielded search). Be aware that not all of the keywords currently have data set descriptions (i.e., metadata) behind them. Therefore, one may not see all the keywords available in your search. Additional free-text keywords may also be specified in the "Ancillary Keyword" field. The maintenance, stability, and ongoing vigilance in maintaining mutually exclusive and parallel keyword lists is of upmost importance for search and discovery and provides a unique and parallel advantage to the user community.

Policy for Accepting Additions, Deletions, or Changes to the GCMD Keywords: The GCMD will accept additions or changes to the keywords, which may be suggested through the GCMD's Users' Support Office. Any additions, deletions, or changes to placement within the keyword structure will be channeled through the internal "GCMD Keyword Working Group", where the acceptance and placement within the keyword structure will be assessed. Requests for considering additional placements within the structure may be suggested. In all cases, modifications must be aligned within the keyword structure and follow the "Keyword Rules" with the primary goals of maintaining mutually exclusive, parallel lists for the user searching.

**Policy and Procedures for Keyword Modification:** The GCMD will consider the keyword additions or modifications to the current keywords. These may be suggested/presented through the Interoperability Forum [http://gcmd.gsfc.nasa.gov/User/forum/]. If one wishes to suggest a modification (addition/deletion/or modification) to any of the GCMD keyword lists, the following procedures must be followed:

Table #1: Guidelines to Users for Keyword Modification

1. Verify that the keyword you are suggesting does NOT already exist in the current keyword

hierarchy.

2. Provide a written request to GSFC-GCMDUSO@mail.nasa.gov to add or modify a keyword(s).

All requests must include complete definitions of the keywords that you wish to be considered,

if your request is an addition. Please allow 30 days for a reply to your request.

2a. In some instances, you may be asked to provide additional justification for your request. In

these cases, you should repeat Step 2.

**2b.** If you receive an acceptance for your new keyword(s) or suggested modification(s), you may

decide to accept or withdraw your suggestion.

2c. If no agreement is reached within the directory confines, the keyword issues will be sent to

the appropriate GCMD UWG member holding the most expertise in the content area for

clarification and decision.

2d. If agreement is reached, the authors of all DIFs and SERFs affected will then be notified to

ascertain that the change is acceptable. If DIF or SERF authors choose to hold a copy of the modified metadata at their local site, the revised descriptions should be retrieved from the

GCMD database so that additional changes made locally can be made to the revised records.

3. Accepted changes will be made available to the public through an announcement on the

GCMD website.

**Existing Document:** "Procedures for GCMD Keyword Modification"

http://gcmd.nasa.gov/Resources/valids/valids proc.html

**Existing Document:** "Science Keyword Rules".

http://gcmd.nasa.gov/Resources/valids/rules.html

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